Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1.   (Previously Presented) A method of generating a data stream to functionally verify a video display system, the method comprising:

detecting a data selection signal; and

responsive to the data selection signal, providing the data stream to the video display system,

wherein the providing of the data stream includes composing the data stream utilizing a combination of algorithmically generated data and stored data to produce a video test pattern.

2.   (Previously Presented) The method of claim 1 wherein the providing of the data stream is performed utilizing state machine generated data.

3.   (Previously Presented) The method of claim 1 wherein the providing of the data stream is performed under the control of a state machine.

4.   (Cancelled)

5.   (Cancelled)

6.   (Previously Presented) The method of claim 1 wherein the data stream comprises a plurality of packets of data.

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7.   (Cancelled)

8.   (Cancelled)

9.   (Previously Presented) The method of claim 1 wherein the video display system comprises any one of a group of including a SMPTE-259M, SMPTE-292M and a Digital Video Interface (DVI) device.

10.   (Previously Presented) The method of claim 1 further comprising utilizing the data stream to perform built-in self-test of the video display system in parallel with the functional verification of the video display system.

11.   (Previously Presented) The method of claim 10 further comprising feeding the data stream to the video display system and to a checksum generator circuit.

12.   (Original) The method of claim 11 further comprising comparing an output of the checksum generator circuit to an expected checksum.

13.   (Previously Presented) The method of claim 12 wherein the comparison is performed at a selected point within the data stream.

14.   (Previously Presented) The method of claim 1 wherein the video display system comprises part of a host system, and the data stream is fed to the host system.

15.   (Original) The method of claim 14 wherein the host system comprises a digital television system.

16.   (Previously Presented) A test circuit to generate a data stream to functionally verify a video display system, the test circuit comprising:

a selection input to receive a data selection signal; and

a data stream generator, responsive to the data selection signal, to output the data stream to verify the video display system,

wherein the data stream generator is to compose the data stream, utilizing a combination of algorithmically generated data and stored data, to include a video test pattern.

17.   (Previously Presented) The test circuit of claim 16 wherein the data stream generator is to compose the data stream utilizing state machine generated data.

18.   (Previously Presented) The test circuit of claim 16 wherein presentation of the data stream is performed under the control of a state machine of the data stream generator.

19.   (Cancelled)

20.   (Cancelled)

21.   (Previously Presented) The test circuit of claim 16 wherein the data stream comprises a plurality of packets of data.

22.   (Cancelled)

23.   (Cancelled)

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24. (Previously Presented) The test circuit of claim 16 wherein the video display system comprises any one of a group of including a SMPTE-259M, SMPTE-292M and a Digital Video Interface (DVI) device.

25. (Previously Presented) The test circuit of claim 16 further comprising built-in self-test circuitry to utilize the data stream to perform a built-in self-test of the video display system in parallel with the functional verification of the video display system utilizing the output of the video display system generated responsive to the input of the data stream.

26. (Previously Presented) The test circuit of claim 25 further comprising feeding the data stream to the video display system for the functional verification and to a checksum generator circuit for the built-in self-test.

27. (Original) The test circuit of claim 26 further comprising comparing an output of the checksum generator circuit to an expected checksum.

28. (Previously Presented) The test circuit of claim 27 wherein the comparison is performed at a selected point within the data stream, the selected point being determined by a state machine.

29. (Previously Presented) The test circuit of claim 16 wherein the video display system comprises part of a host system, and the data stream is fed to the host system.

30. (Previously Presented) The test circuit of claim 29 wherein the host system comprises a digital television system.

cancelled

31.   (Previously Withdrawn) A method of testing a circuit comprising:

providing test data to the circuit, the test data functionally to verify the circuit, wherein the functional verification of the circuit is performed utilizing an output of the circuit generated responsive to the test data in accordance with operational functionality of the circuit; and

providing the test data to a built-in self-test (BIST) circuit in parallel with the provision thereof to the circuit, wherein the built-in self-test generates a BIST output responsive to the test data.

cancelled

32.   (Previously Withdrawn) The method of claim 31 wherein the built-in self-test circuit includes a checksum generator, and the method includes comparing an output of the checksum generator to an expected checksum.

cancelled

33.   (Previously Withdrawn) The method of claim 32 including retrieving the expected checksum from storage associated with the built-in self-test circuit.

cancelled

34.   (Previously Withdrawn) The method of claim 33 comprising retrieving the expected checksum from a lookup table.

cancelled

35.   (Previously Withdrawn) The method of claim 32 wherein the built-in self-test circuit includes a built-in self-test state machine.

cancelled

36.   (Previously Withdrawn) The method of claim 35 wherein the built-in self-test state machine initiates the comparison of the output of the checksum generator to the

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expected checksum at a selected point in the test data.

cancelled

37.   (Previously Withdrawn) The method of claim 31 wherein the functional

verification is performed utilizing an output of a system including the circuit.

cancelled

38.   (Previously Withdrawn) The method of claim 37 wherein the system comprises a

digital video device, and where the output of the system is viewable on a video display to

functionally verify the system.

cancelled

39.   (Previously Withdrawn) The method of claim 38 wherein the output defines a test

pattern.

cancelled

40.   (Previously Withdrawn) A test system comprising:

a test data generator to provide test data to a subject circuit, the test data

functionally to verify the subject circuit, wherein the functional verification of the

subject circuit is performed utilizing an output of the subject circuit generated

responsive to the test data in accordance with operational functionality of the

subject circuit; and

a built-in self-test (BIST) circuit to receive the test data concurrently with the

provision thereof to the subject circuit.

cancelled

41.   (Previously Withdrawn) The test system of claim 40 wherein the built-in self-test

circuit includes a checksum generator and compares an output of the checksum generator

to an expected checksum.

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42. (~~Previously Withdrawn~~) *Cancelled* The test system of claim 41 wherein the built-in self-test circuit is to retrieve the expected checksum from storage associated with the built-in self-test circuit.

cancelled

43. (~~Previously Withdrawn~~) The test system of claim 42 wherein the built-in self-test circuit is to retrieve the expected checksum from a lookup table.

cancelled

44. (~~Previously Withdrawn~~) The test system of claim 40 wherein the built-in self-test circuit includes a built-in self-test state machine.

cancelled

45. (~~Previously Withdrawn~~) The test system of claim 41 wherein the built-in self-test state machine is to initiate a comparison of the output of the checksum generator to the expected checksum at a selected point in the test data.

cancelled

46. (~~Previously Withdrawn~~) The test system of claim 40 wherein the functional verification is performed utilizing an output of a system including the subject circuit.

cancelled

47. (~~Previously Withdrawn~~) The test system of claim 45 wherein the system comprises a digital video device, and where the output of the system is viewable on a video display to functionally verify the system.

cancelled

48. (~~Previously Withdrawn~~) The test system of claim 47 wherein the output defines a test pattern.

49. (Previously Withdrawn) A method of manufacturing a test circuit to generate test data to functionally verify a subject circuit, the method comprising:

constructing a selection input to receive from a data selection signal;

coupling a test data composer to an algorithmic data generator and to a data storage unit,

coupling the selection input to a test data generator so as to enable the test data composer, responsive to the data selection signal, to output test data to verify the circuit, the test data generator to compose the test data utilizing a combination of algorithmically generated data retrieved from the algorithmic data generator and stored data retrieved from the data storage unit.

50.   (Withdrawn) A method of manufacturing a test system, the method comprising:

providing a data stream generator to provide a data stream to a video display system, the data stream functionally to verify the video display system, wherein the functional verification of the video display system is performed utilizing an output of the video display system generated responsive to the data stream in accordance with an operational functionality of the video display system; and

coupling the data stream generator to a built-in self-test (BIST) circuit so as to enable the built-in self-test circuit to receive the data stream concurrently with the provision thereof to the video display system.

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